

# North Central Alaska

## Fuels and Fire Behavior Advisory

Issued May 28, 2010

For Time Period May 28 to June 2, 2010

**Subject:** Large Fire Growth Potential: High Buildup Index (BUI) values and Low Fine Fuel Moistures in Boreal Forest Fuel Complexes in North-central Alaska

**Discussion:** A low winter snowpack in north-central Alaska and warm spring temperatures combined with a lack of precipitation has driven fuel conditions to historical maximum levels at Tok and Fairbanks Alaska. As surface drying FPMC values climb into the 90+ range the potential for rapid spread rates, running crown fire in Black Spruce and Conifer-Hardwood mixes is greatly increased. Cumulative curing in feather mosses and surface litter and deep drying in duff layers will contribute to high intensity fires. A high pressure system centered over Alaska continues drying fuels to more critical levels. A break down in the upper level ridge beginning next week may bring conditions favorable for plume dominated fires. Current fuel driven fires are exhibiting short crown-fire runs and prevalent torching. Moderate range spotting is becoming more common.

**Fire Intensity will increase and will elevate burning conditions.**

### Concerns to Firefighters and the Public:

- High rates of spread in conifer black spruce stands and hardwood-black spruce mix.
- Dry atmospheric conditions and instability will elevate burning conditions.
- Fuels are conducive to large fire growth.
- Spotting fire behavior with low fine fuel moistures will increase resistance to control efforts.
- Hardwood stands of Birch and Aspen are stressed from hydrological-drought conditions.
- North slopes are dryer than usual from lack of snow and will burn more readily.
- Thunderstorms will produce strong and erratic winds that will change fire direction and head fire position.
- Brief incoming fire-fighters and public of fire danger and fire potential.

### Mitigation Measures:

- Use barriers when possible with burn-outs to secure fuels and fire breaks.
- Ensure firefighters have good anchor points - keeping one foot in the black.
- Use aircraft and observers to keep current position and fire behavior.
- Use indirect methods when intensity and flame length is too high.

**Area of Concern:** The Tanana Valley and eastward to the Alaska Canadian – Yukon border and into the Upper Yukon Valley.

Predictive Services AICC  
Cole/Alden